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| | | | ULLAH MASUD, MOHAMMAD R | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Application No. Applicant(s) 10/589 273 GRETSCH ET AL. Office Action Summary Examiner Art Unit MOHAMMAD R. ULLAH MASUD 3687 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 23 June 2010. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 37-66 and 69 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) _____ is/are allowed. 6) Claim(s) 37-66 and 69 is/are rejected. 7) Claim(s) _____ is/are objected to. 8) Claim(s) _____ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are; a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abevance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 102004007459.3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s)

U.S. Patent and Trademark Office PTOL-326 (Rev. 08-06)

1) Notice of References Cited (PTO-892)

Paper No(s)/Mail Date

Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/06)

Interview Summary (PTO-413)
 Paper No(s)/Mail Date.

6) Other:

5) Notice of Informal Patent Application

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DETAILED ACTION

This Office action responds to the amendment and arguments filed by applicant on June 23, 2010 in reply to the previous Office action on the merits, mailed March 31, 2010.

Prosecution History Summary

- · Claims 37-66 and 69 are pending in the instant application.
- Claims 37-42, 45-48, 50-53, 58, 59, and 64-66 are "currently amended".
- · Claims 67, 68 and 70 are "Cancelled".

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 37 – 66, and 69 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

In order for a method to be considered a "process" under §101, a claimed process must either: (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or materials). *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972). If neither of these requirements is met by the claim, the method is not a patent eligible process under §101 and is non-statutory subject matter.

These claims recite limitations for example "providing a material flow system", "providing an implemented logic device", "determining, in a first partial process". However, there is not any recitation of any apparatus to perform these methods. It is also noted that the mere recitation of a machine in the preamble in a manner such that the machine fails to patentably limit the scope of the claim does not make the claim statutory under 35 U.S.C. § 101, as seen in the Board of Patent Appeals Informative Opinion *Ex parte* Langemyr et al. (Appeal2008-1495), http://www.uspto.gov/web/offices/dcom/bpai/its/fd081495.pdf.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- Claims 37 40, 42 66, and 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Costanza (US 6,594,535), in view of Ohno et al. (US 4,803,634) (hereinafter referred to as Ohno).

With respect to **claim 37**, Costanza discloses a method of materials for use in a material processing machine including:

providing a material flow system (abstract discusses a material flow system);

providing an implemented logic device in said material flow system (column 7 lines 48 –
67 discusses logic device);

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providing said material flow system with production relevant data for a planned production run (column 4 lines 13-29 discloses system that includes production relevant data with planned production run bill-of-material);

determining, in a first partial process of said material flow system, a production-oriented storage strategy using said production-relevant data for said planned production run (column 4 lines 13-29 discloses system that determine strategy material requirement for manufacturing line for each point of usage in the pull sequence);

determining, in a second partial process of said material flow system, information on an occupancy in said depot (column 4 lines 13-29 discloses system that determine strategy material requirement for manufacturing line for each point of usage in the pull sequence and "Pull sequences are defined such that material flows from a raw inventory storage or an independent production path through one or more points-of-usage to the production path of the manufacturing line in response to the need for that material at the production path").

Costanza is silent regarding flow system and planned production run that is for web-fed rotary printing machine, depot for storing unprepared and prepared rolls of material for use in roll changer in a web-fed rotary printing machine, using said production-oriented storage strategy and repositioning said unprepared and prepared rolls of material in occupancy in said depot for optimized delivery of said prepared rolls of material to said roll changers of said web-fed rotary printing machine from said depot for preparing previously unprepared rolls of material for their delivery to said roll changers of said web-fed rotary printer machine in accordance with said production-oriented storage strategy.

However, Ohno teaches that it is old and well known in the art of material flow system.

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wherein flow system and planned production run that is for web-fed rotary printing machine, depot for storing unprepared and prepared rolls of material for use in roll changer in a web-fed rotary printing machine (column 25 lines 42 -64 discusses flow system and planned production run for web-fed rotary printing machine), and

using said production-oriented storage strategy and repositioning said unprepared and prepared rolls of material in occupancy in said depot for optimized delivery of said prepared rolls of material to said roll changers of said web-fed rotary printing machine from said depot (column 25 lines 35 – column 26 line 19 discusses strategy repositioning prepared and unprepared roll for optimized delivery) and

for preparing previously unprepared rolls of material for their delivery to said roll changers of said web-fed rotary printer machine in accordance with said production-oriented storage strategy (column 25 lines 35 – column 26 line 19 discusses preparing previously unprepared rolls of material for their delivery with production oriented storage strategy).

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the method of Costanza, in accordance with the teachings of Ohno, in order to use material in material flow system, flow system and planned production run that is for web-fed rotary printing machine, depot for storing unprepared and prepared rolls of material for use in roll changer in a web-fed rotary printing machine, using said production-oriented storage strategy and repositioning said unprepared and prepared rolls of material in occupancy in said depot for optimized delivery of said prepared rolls of material to said roll changers of said web-fed rotary printing machine from said depot for preparing previously unprepared rolls of material for their

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delivery to said roll changers of said web-fed rotary printer machine in accordance with said production-oriented storage strategy in order to perform material flow system.

With respect to **claim 38**, Costanza, discloses a method of considering criteria for a degree of use of storage in said depot in said planned production run (see, for example, column 4 lines 6 - 29).

With respect to **claim 39**, Costanza, discloses a method further including considering criteria for an intended length of storage time of said material during said planned production run (see, for example, column 4 lines 6 – 29), but does not teaches the method wherein the material is fresh rolls of material

However, Ohno teaches the limitations wherein the material is for fresh rolls of material (see, for example, column 23 lines 13 – 39).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the method of Costanza, in accordance with the teachings of Ohno, in order to use material in material flow system wherein it for fresh rolls of material, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

With respect to claim 40, Costanza, discloses a method further including determining said storage strategy including considering criteria for an intended length of storage time of fresh rolls during said planned production run (see, for example, column 3 line 66 – column 4 line 49).

With respect to claim 42, Costanza, discloses a method further including providing a first shelf block remote from said machine in said depot, providing a second shelf block adjacent said

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machine and providing an inner shelf block located between said first shelf block and said second shelf block (see, for example, column 3 line 66 – column 4 line 49).

But silent regarding the machine being web-fed rotary printing machine.

Ohno teaches that it is old and well known in the art of material flow system, wherein the machine is web-fed rotary printing machine (column 23 lines 13-39).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the method of Costanza, wherein the machine is web-fed rotary printing machine as taught by Ohno, in order to facilitate material in material flow system.

With respect to claim 43, Costanza, discloses a method including, in a low storage application utilizing said first shelf block for storage of only unprepared rolls, utilizing said second shelf block for storage of prepared rolls and maintaining said inner shelf block empty except for passage of said rolls (see, for example, column 3 line 66 – column 4 line 49).

With respect to **claim 44**, Costanza, discloses a method including, in one of a normal storage and a high storage application, utilizing said first shelf block for storage of only unprepared rolls, utilizing said second shelf block for storage of only prepared rolls and utilizing said inner shelf block as a buffer for unprepared rolls and for prepared rolls (see, for example, column 3 line 66 – column 4 line 49).

With respect to claim 45, Costanza, discloses all the above mentioned limitations but does not explicitly teach the limitation further including considering criteria of a type of said rolls of material needed in said planned production run and further including differentiating in said type of said rolls of material needed between many small planned production run and fewer large planned production run.

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However, Ohno teaches the limitation further including considering criteria of a type of said rolls of material needed in said planned production run and further including differentiating in said type of said rolls of material needed between many small planned production run and fewer large planned production run (see, for example, column 26 lines 20 -27 and 59 - 67).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the method of Costanza, in accordance with the teachings of Ohno, in order to use material in material flow system considering criteria of a type of said rolls of material needed in said planned production run and further including differentiating in said type of said rolls of material needed between many small planned production run and fewer large planned production run, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

With respect to claim 46, Costanza, discloses a method further including reserving sufficient space in said depot for the return of used rolls to said depot when said planned production run includes said many small planned production run (see, for example, column 3 line 66 – column 4 line 49).

With respect to **claim 47**, Costanza, discloses a method further including storing said prepared rolls in a travel optimized manner when said production period includes said fewer large planned production run (see, for example, column 3 line 66 – column 4 line 49).

With respect to **claim 48**, Costanza, discloses a method further including, determining said strategy for repositioning in said depot using criteria for a degree of storage use to be expected during said planned production run (see, for example, column 3 line 66 – column 4 line 49), but does not explicitly teach the limitation wherein it is for prepared and unprepared rolls of material.

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However, Ohno teaches the limitation wherein it is for prepared and unprepared rolls of material (see, for example, column 25 lines 42 -56 and column 26 lines 28 - 37, column 27 lines 28 -39).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the method of Costanza, in accordance with the teachings of Ohno, in order to use material in material flow system wherein it is for prepared and unprepared rolls of material, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

With respect to claim 49, Costanza, discloses all the above mentioned limitations but does not explicitly teach the limitation further including providing said material flow system with information regarding an actual stock of said rolls of material on hand.

However, Ohno teaches the limitation further including providing said material flow system with information regarding an actual stock of said rolls of material on hand (see, for example, Fig. 28, column 26 lines 59 – 67, column 27 lines 3 - 6).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the method of Costanza, in accordance with the teachings of Ohno, in order to use material in material flow system further including providing said material flow system with information regarding an actual stock of said rolls of material on hand, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

With respect to claim 50, Costanza, discloses a method further including determining a strategy for a production-oriented repositioning in said depot using criteria for an extent of depot

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occupancy during said planned production run (see, for example, column 3 line 66 – column 4 line 49).

With respect to claim 51, Costanza, discloses a method further including providing roll changers in said machine and considering an extent of occupancy of said depot whenever, in low occupancy, storage of said prepared rolls is taking place in a path-optimized manner with respect to one of said roll changers to be served and wherein, in high occupancy, storage of said prepared rolls is taking place chaotically in said depot acting together with active ones of said roll changers (see, for example, column 3 line 66 – column 4 line 49).

But silent regarding the machine being web-fed rotary printing machine.

Ohno teaches that it is old and well known in the art of material flow system, wherein the machine is web-fed rotary printing machine (column 23 lines 13-39).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the method of Costanza, wherein the machine is web-fed rotary printing machine as taught by Ohno, in order to facilitate material in material flow system.

With respect to claim 52, Costanza, discloses a method further including providing a first serving element remote from said machine and locating said first serving element between said first and third shelf blocks, and further including providing a second serving element adjacent said machine and locating said second serving element between said second and said inner shelf blocks (see, for example, column 3 line 66 – column 4 line 49).

But silent regarding the machine being web-fed rotary printing machine.

Ohno teaches that it is old and well known in the art of material flow system, wherein the machine is web-fed rotary printing machine (column 23 lines 13-39).

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Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the method of Costanza, wherein the machine is web-fed rotary printing machine as taught by Ohno, in order to facilitate material in material flow system.

With respect to **claim 53**, Costanza, discloses a method further including locating ones of said prepared rolls, which will be required for use within a short time in one of said second and said inner shelf blocks (see, for example, column 3 line 66 – column 4 line 49).

With respect to claim 54, Costanza, discloses a method further including redepositioning unprepared ones of said rolls of material for preparation of said rolls of materials in an access area of said second serving element (see, for example, column 3 line 66 – column 4 line 49).

With respect to claim 55, Costanza, discloses all the above mentioned limitations but does not explicitly teach the limitation further including providing a roll preparation circuit in said depot and processing said unprepared rolls in said roll preparation circuit.

However, Ohno teaches the limitation further including providing a roll preparation circuit in said depot and processing said unprepared rolls in said roll preparation circuit (see, for example, column 27 lines 28 -39).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the method of Costanza, in accordance with the teachings of Ohno, in order to use material in material flow system further including providing a roll preparation circuit in said depot and processing said unprepared rolls in said roll preparation circuit, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

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With respect to claim 56, Costanza, discloses all the above mentioned limitations but does not explicitly teach the limitation further including providing a roll preparation circuit in said depot and removing unprepared rolls from one of said first shelf block and said inner shelf block, using one of said serving elements, and supplying said unprepared rolls to said roll preparation circuit.

However, Ohno teaches the limitation further including providing a roll preparation circuit in said depot and removing unprepared rolls from one of said first shelf block and said inner shelf block, using one of said serving elements, and supplying said unprepared rolls to said roll preparation circuit (see, for example, column 27 lines 19 - 39).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the method of Costanza, in accordance with the teachings of Ohno, in order to use material in material flow system further including providing a roll preparation circuit in said depot and removing unprepared rolls from one of said first shelf block and said inner shelf block, using one of said serving elements, and supplying said unprepared rolls to said roll preparation circuit, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

With respect to claim 57, Costanza, discloses all the above mentioned limitations but does not explicitly teach the limitation further including placing said rolls of material, after passage through said roll preparation circuit, into intermediate storage in said inner shelf block.

However, Ohno teaches the limitation further including placing said rolls of material, after passage through said roll preparation circuit, into intermediate storage in said inner shelf block (see, for example, column 27 lines 19 -39).

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Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the method of Costanza, in accordance with the teachings of Ohno, in order to use material in material flow system further including placing said rolls of material, after passage through said roll preparation circuit, into intermediate storage in said inner shelf block, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

With respect to claim 58, Costanza, discloses a method further including storing said rolls of material in one of said first shelf block and said inner shelf block as a result of a storage demand from said first partial process (see, for example, column 3 line 66 – column 4 line 49).

With respect to claim 59, Costanza, discloses a method further including delivering a prepared roll of said material from one of said first storage block and said inner storage block to a storage space in said second shelf block as a result of a storage demand from said first partial process (see, for example, column 3 line 66 – column 4 line 49).

With respect to **claim 60**, Costanza, discloses a method further including categorizing a degree of occupancy of said depot below 40% as low occupancy (see, for example, column 3 line 66 – column 4 line 49).

With respect to **claim 61**, Costanza, discloses a method further including categorizing a degree of occupancy of said depot above 70% as high occupancy (see, for example, column 3 line 66 – column 4 line 49).

With respect to **claim 62**, Costanza, discloses a method further including storing said criteria in exact and changeable definition (see, for example, column 3 line 66 – column 4 line 49).

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With respect to **claim 63**, Costanza, discloses a method further including storing said criteria in a form of a changeable term of a linguistic variable of a fuzzy logic control (see, for example, column 23 lines 51 -61 and claim 1).

With respect to claim 64, Costanza, discloses a method further including providing one of a computing unit and a data processing unit in said material flow system and forwarding one of production-relevant data and use data regarding planned production from production planning system to said one of said computing unit and said data processing unit (see, for example, figure 1 and column 7 lines 48-67).

With respect to claim 65, Costanza, discloses a method further including determining said storage strategy and a deposit request for said unprepared rolls of material using said one of said computing unit and said data processing unit using said production relevant data for said planned production run and information regarding an actual stock of said rolls of material, and further including fixing a time for a production preparation of said rolls of material in a preparation circuit using said implemented logic device in said material flow system and considering a limited shelf life of a glue preparation and a planned length of said production run (see, for example, column 3 line 66 – column 4 line 49).

With respect to claim 66, Costanza, discloses all the above mentioned limitations but does not explicitly teach the limitation directing a partial signal requesting rolls of material to said material flow system, registering said partial signal in said one of said computing unit and said data processing unit and determining said partial signal using existing data regarding depot occupancy for availability in said depot and ordering removal of said prepared and unprepared

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rolls of material from said depot in response to said request directly through said material flow system.

However, Ohno teaches the limitation further including directing a partial signal requesting rolls of material to said material flow system, registering said partial signal in said one of said computing unit and said data processing unit and determining said partial signal using existing data regarding depot occupancy for availability in said depot and ordering removal of said prepared and unprepared rolls of material from said depot in response to said request directly through said material flow system (see, for example, column 26 lines 20 -27 and 59 - 67).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the method of Costanza, in accordance with the teachings of Ohno, in order to use material in material flow system directing a partial signal requesting rolls of material to said material flow system, registering said partial signal in said one of said computing unit and said data processing unit and determining said partial signal using existing data regarding depot occupancy for availability in said depot and ordering removal of said prepared and unprepared rolls of material from said depot in response to said request directly through said material flow system, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

With respect to claim 69, Costanza, discloses a method further including providing storage spaces in said depot for storing said unprepared and prepared rolls of material, continuously checking an occupancy of said depot in respect to planned requirements using a predetermined criteria and positioning said unprepared and prepared rolls of material in said storage spaces in a production-optimized manner (see, for example, column 3 line 66 – column 4 line 49).

1. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Costanza and

Ohno, as modified above and further in view of Examiner's Official Notice.

Costanza, discloses all the above mentioned limitations but does not explicitly teach the limitation further including considering a period of an effectiveness of a glue preparation of said rolls of material during said planned production period run using said implemented logic device.

However, Ohno teaches the limitation further including considering an effectiveness of a glue preparation of said rolls of material during said planned production period run using said implemented logic device(see, for example, column 25 lines 42 -56 and column 26 lines 28 - 37, column 27 lines 28 -39), and

Examiner takes Official Notice that that it is old and well known in the art of material flow to consider a period of an effectiveness of a glue preparation of rolls of material.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the method of Costanza, in accordance with the teachings of Ohno, and further in view of Examiner's Official Notice to consider a period of an effectiveness of a glue preparation of said rolls of material during said planned production period run using said implemented logic device in order to facilitate material flow.

Response to Arguments

Applicant's arguments with respect to pending claims have been considered but are moot in view of the new ground(s) of rejection. Application/Control Number: 10/589,273 Page 17

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Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MOHAMMAD R. ULLAH MASUD whose telephone number is (571)270-5390. The examiner can normally be reached on MONDAY TO THURSDAY 9.00 AM TO 5.30 PM (EASTERN TIME).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MATTHEW S. GART can be reached on (571)272-3955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. R. U./ Examiner, Art Unit 3687

/Matthew S Gart/ Supervisory Patent Examiner, Art Unit 3687